

Claims

[c1] 1.A polyester composition comprising a mixture of:
a) at least one first polyester resin;
b) at least about 0.25% by weight based on the weight of the first polyester resin of a concentrate consisting essentially of a uniform mixture of a second polyester resin, wherein the second polyester resin may be the same or different as the first polyester resin, and from about 5 to 75% by weight based on the weight of the concentrate of a Periodic Table Group I or Group II metal phosphate;
c) at least one polycarbonate polymer present in the composition at a weight ratio of the first and second polyester resins to polycarbonate polymer in the range of from about 10:90 to 90:10;
d) at least one light-colored pigment additive selected from the group consisting of a metal oxide or metal sulfide; and
e) optionally, an organic halogenated flame retardant and an inorganic flame retardant synergist.

[c2] 2.The composition of claim 1 wherein the pigment additive is selected from the group consisting of titanium dioxide, zinc oxide, zinc sulfide and lithopone.

[c3] 3.The composition of claim 2 wherein the pigment additive comprises zinc sulfide.

[c4] 4.The composition of claim 1 wherein the halogenated flame retardant comprises a halogenated polycarbonate present in an amount sufficient to impart flame retardant properties to the composition, and an antimony compound as a synergist.

[c5] 5.The composition of claim 4 wherein the pigment additive is selected from the group consisting of titanium dioxide, zinc oxide, zinc sulfide and lithopone.

[c6] 6.The composition of claim 5 wherein the pigment additive comprises zinc sulfide.

[c7] 7.The composition of claim 4 wherein the antimony compound comprises antimony trioxide.

[c8] 8.The composition of claim 1 further comprising about 1 to about 50 parts by weight per 100 parts by weight of the composition of a reinforcing filler.

[c9] 9.The composition of claim 8 wherein the reinforcing filler comprises glass fibers.

[c10] 10.The composition of claim 1 further comprising about 1 to about 30% by weight, based on the weight of the total composition, of at least one organic flame retarding agent different from said polycarbonate polymer, and an antimony compound as a synergist.

[c11] 11.The composition of claim 10 wherein the pigment additive is selected from the group consisting of titanium dioxide, zinc oxide, zinc sulfide and lithopone.

[c12] 12.The composition of claim 11 wherein the pigment additive comprises zinc sulfide.

[c13] 13.The composition of claim 10 wherein the antimony compound comprises antimony trioxide.

[c14] 14.The composition of claim 1 wherein the metal phosphate comprises a Group II metal phosphate.

[c15] 15.The composition of claim 14 wherein the metal phosphate is selected from the group consisting of calcium phosphate, zinc phosphate and mixtures thereof.

[c16] 16.The composition of claim 15 wherein the concentrate is present in the composition at about 0.5 to about 15% by weight, based on the total weight of polyester resin in the composition.

[c17] 17.The composition of claim 1 wherein the first polyester resin and the second polyester resin are selected from the group consisting of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthanoate, polybutylene naphthanoate, polypropylene terephthalate, polycyclohexanedimethylene terephthalate and mixtures thereof.

[c18] 18.The composition of claim 17 wherein the first polyester resin and the second

polyester resin comprise polybutylene terephthalate.

[c19] 19. The composition of claim 1 wherein the composition further comprises an anti-dripping agent.

[c20] 20. The composition of claim 1 wherein the composition further comprises one or more of plasticizers, processing aids, stabilizers, antioxidants, nucleants, dyes, and mold release agents.

[c21] 21. A flame retardant polyester composition comprising a mixture of:
a) a polybutylene terephthalate resin;
b) about 0.25 to about 25% by weight, based on the total weight of polybutylene terephthalate resin present in the composition, of a concentrate consisting essentially of a uniform mixture of a polyester resin and a Periodic Table Group II metal phosphate;
c) a brominated polycarbonate oligomer containing about 5 to about 30 wt% bromine, said brominated polycarbonate present at a level of about 10 to about 45% by weight based on the total polymer content of the composition;
d) about 0.5 to about 15 wt%, based on the polymer content of the composition, of an antimony oxide synergist;
e) about 0.1 to about 20 wt%, based on the weight of the total composition, of a zinc sulfide pigment; and
f) about 0 to about 50 parts by weight per 100 parts by weight of the composition, of reinforcing glass fibers.

[c22] 22. The composition of claim 21 wherein the Group II metal phosphate is selected from the group consisting of calcium phosphate, zinc phosphate and mixtures thereof.

[c23] 23. The composition of claim 22 containing at least 1 part by weight of the reinforcing glass fibers.